

#77009rpt

Log completed
14 June 77 JR

Cruise Report

Tug WHITEFOOT

	DY @ SEA	SCR PTY	mm days
Leg I 8-11 March 1977	3	3	9
Leg II 14-20 March 1977	6	3	18
Leg III 31 March-5 April 1977	6	3	18
Leg IV 15-17 April 1977	4	2	8
	<u>19</u>		<u>53</u>

53 mauldays
at sea

WHITEFOOT 8 MAR - 17 APR 77

Brad Butman
U.S. Geological Survey
Woods Hole, Mass. 02543

Vessel: Tug WHITEFOOT

Area of Operation: Georges Bank and New Jersey Continental Shelf

Dates: Leg I 8-11 March 1977
Leg II 14-20 March
Leg III 31 March - 5 April
Leg IV 15-17 April

Personnel:

Roy Campbell, Master	(Leg I - IV)
B. Butman, Chief Scientist	(Leg I - IV)
W. Strahle	(Leg I, II, III)
C. Deadmon	(Leg I, IV)
J. West	(Leg III)

Objectives:

The WHITEFOOT cruises were conducted to recover and deploy oceanographic instrumentation on Georges Bank and on the New Jersey continental shelf. Due to severe winter weather and problems encountered in recovering instrumentation four trips were required to complete the necessary work. The objectives were:

1. Recover and deploy one tripod on Georges Bank
2. Recover ARGO MERCHANT current meter array (three moorings)
3. Recover one tripod and surface buoy in Great South Channel
(part of ARGO MERCHANT array)
4. Recover and deploy one tripod off New Jersey
5. Make XBT observations to determine temperature structure in vicinity of current and tripod moorings.

Narrative:

Leg I. (Recover ARGO MERCHANT current meter array and tripod)

8 March	1850	Depart Woods Hole
9 March	0230	At mooring site 125 (current meter-mooring)
	0630	Recover mooring 125
	1015	At mooring site 124 (current meter mooring)
	1115	Recover mooring 124

9 March	1545	At tripod mooring site 121, released recovery floats; cannot locate floats LORAN C location 10 μ sec off
10 March	0700	At tripod location, no recovery floats visible
	1030-1400	Dragged for tripod, no wire available for dragging; tide holding polypo off the bottom, transponder on tripod working well
	1400	Depart for mooring 123 (current meter mooring)
	1700	On mooring site 123, tide extremely strong; wait for slack water to recover mooring.
	2000	Recover mooring 123, rotor in current meter missing.
	2100	Depart for Woods Hole
11 March	0500	Arrive Woods Hole, Prepare WHITEFOOT for dragging operations to recover tripod in South Channel.
 <u>Leg II.</u> (Drag for Great South Channel tripod, and recover tripod on Georges Bank)		
14 March	1900	Depart Woods Hole
15 March		At mooring site 121. Attempted dragging for tripod, but weather too rough. Bent grappling hook. Await calmer weather.
16 March	1300-2000	Dragged for tripod
17 March		Rough weather. Wind 40-50 mph N.W. Hove too. Drifted across Bank
18 March		At mooring site 120 (South flank Geogres Bank) await calm weather
	1300	Recover tripod Underway to Woods Hole
	1400	Trouble with fuel supply. Changing oil filters every 2-4 hours. S.E. gale.
19 March		Wind N.W. 50-60 mph. Filter supply exhausted. Request Coast Guard assistance.
	0800	In tow by C.G. Cutter GALLATIN
	1600	Switch tow to C.G. Cutter POINT BONITA
	2230	At WHOI dock. WHITEFOOT returned to Vineyard Haven under own power with last fuel filters.

Leg III. (Recover and deploy tripod off New Jersey)

30 March Depart Woods Hole

1 April Steaming along south side L.I. - NW winds 20-30 mph

2 April 0400 Deploy surface markers; ideal weather conditions
Deploy tripod (mooring 122)

0800 At tripod mooring site 119. No transpond from release. Conduct search. Tripod located ~5 miles NE of deployed location; apparently dragged by fishermen. Seas too rough to recover. Hove too; await better weather.

3 April Jog to NW, winds SW

1800 Return to tripod site. Release tripod recovery floats; no floats visible on surface. Tripod apparently tripped over. Rig grappling gear. Tripod floats surfaced; apparently released when grappling hook jarred tripod.

2200 Complete offshore XBT transect.
Underway to Station A.

4 April 0600 Arrive Station A to recover surface marker. Search 2 x 2 mi. square. No surface marker to be found.

0800 Underway to Woods Hole

5 April 0030 Wind 50-60 mph NE. Take refuge in Block Island Harbor.

0830 Depart Block Island

1600 Arrive Woods Hole

Leg IV. (Deploy tripod on Georges Bank, recover South Channel tripod)

15 April 1300 Depart Woods Hole

1630 Start XBT and surface salinity

16 April 1030 At Georges Bank mooring site. Beautiful weather for a change.
Deploy surface marker
Deploy tripod
Recover surface marker
Light surface marker

1300 Underway to South Channel

17 April 0600 At tripod mooring site. Beautiful weather. Set small surface marker as close as possible to tripod for dragging marker. Drag for tripod - tripod recovery floats on surface.

17 April 0930 Tripod on deck
 1100 Recover surface marker
 1200 Underway to Woods Hole
 2300 Arrive Woods Hole

Tabulated Information:

a. Days at Sea

19

b. Instrumentation recovered

mooring: 119 (tripod Mid-Atlantic)
 " 120 (tripod Georges Bank)
 " 121 (tripod Great South Channel)
 " 123 (current meter, ARGO MERCHANT array)
 " 124 (current meter, " " ")
 " 125 (current meter, " " ")

c. Instrumentation deployed

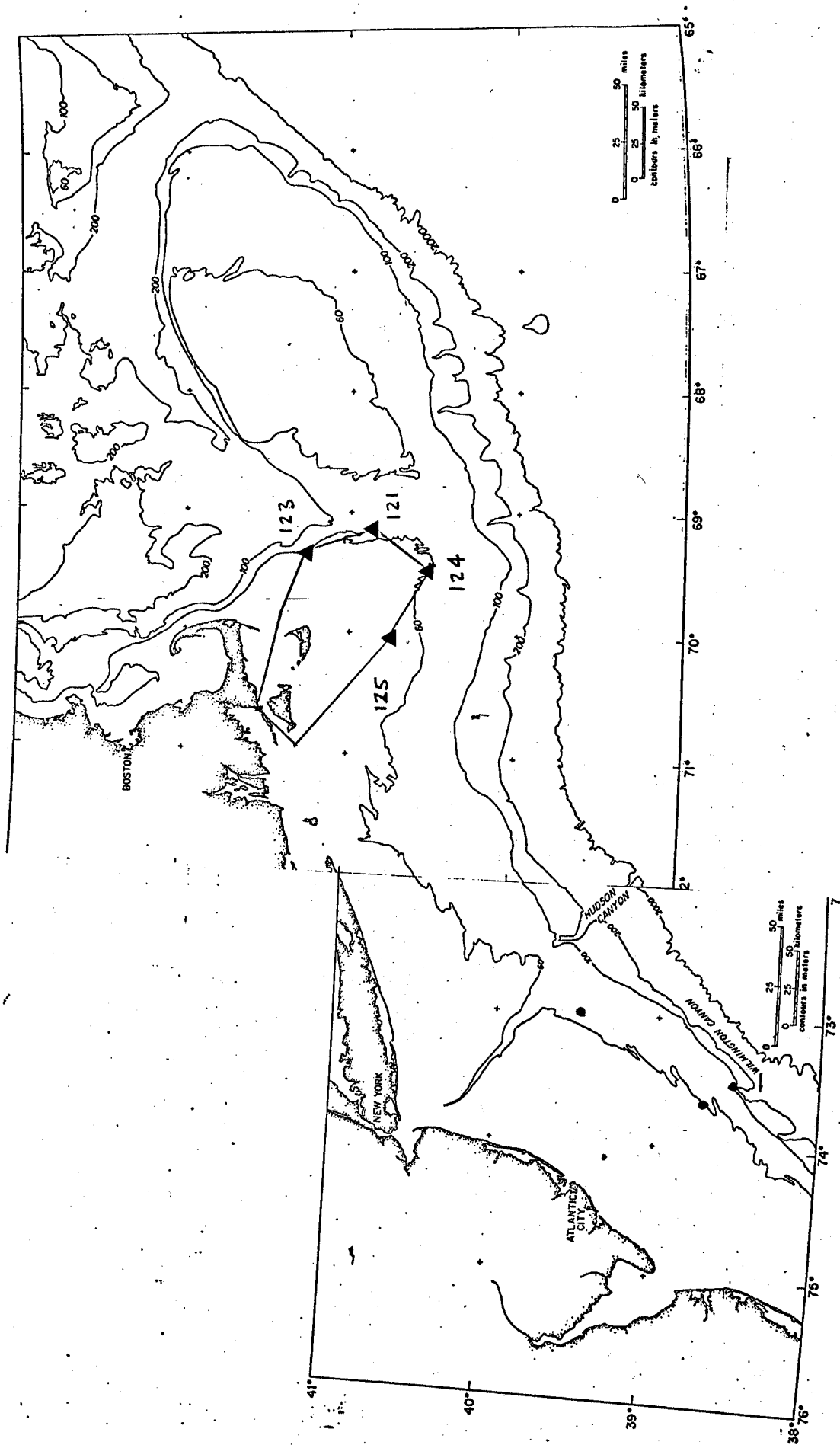
mooring: 122 (tripod Mid Atlantic)
 126 (tripod Georges Bank)

d. XBT
 , Surface Salinity

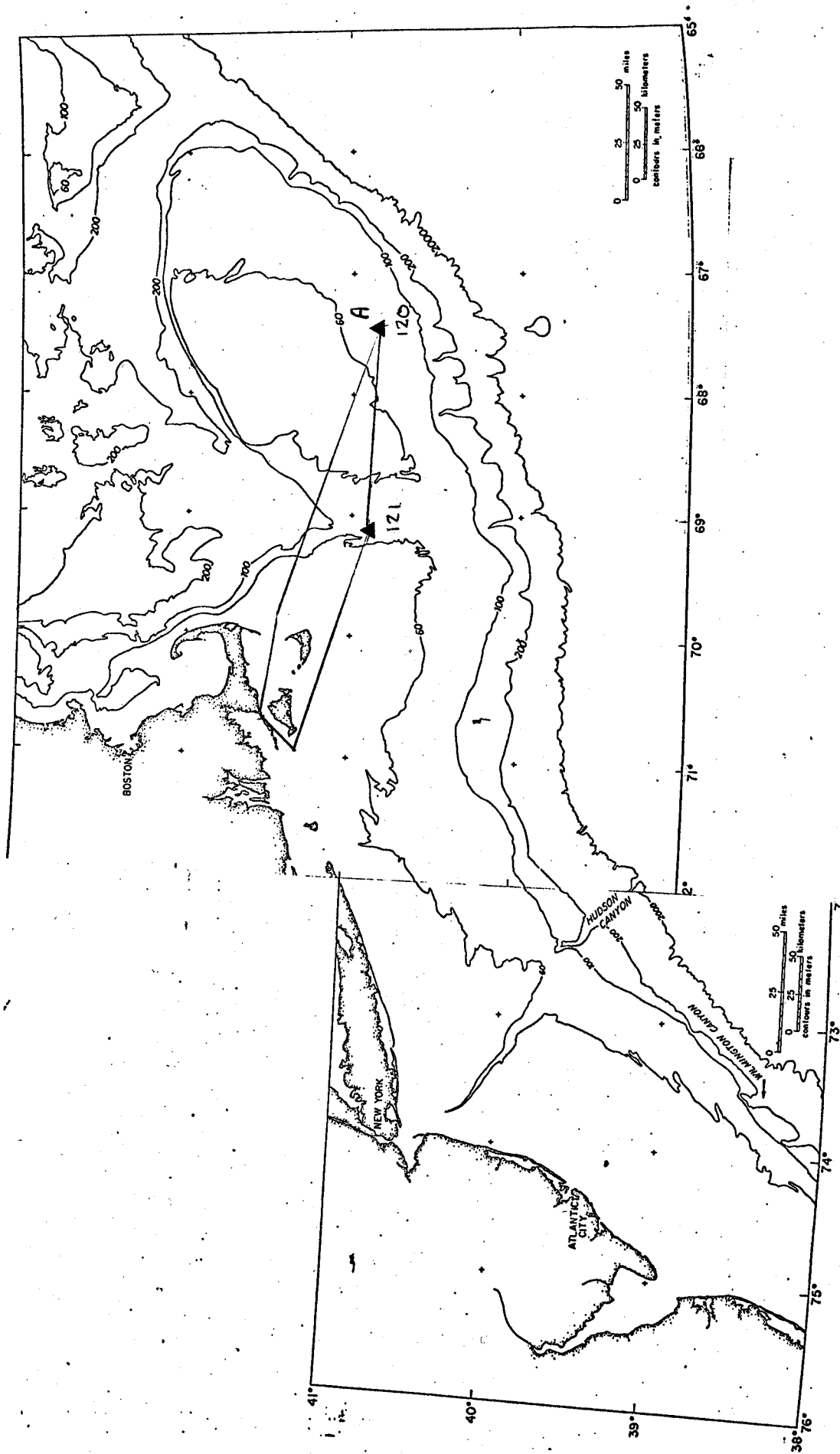
41
 41

3. Total distance

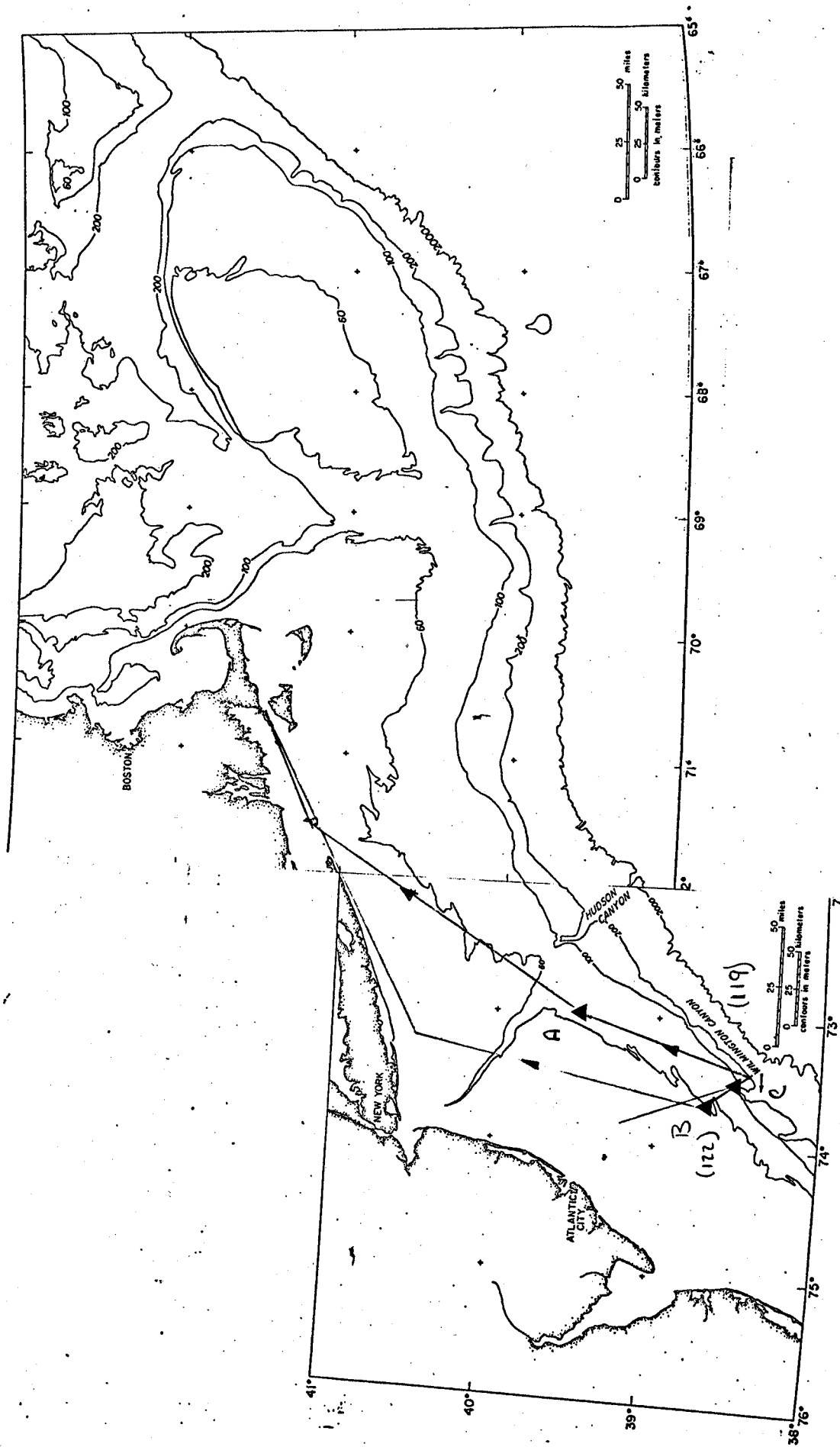
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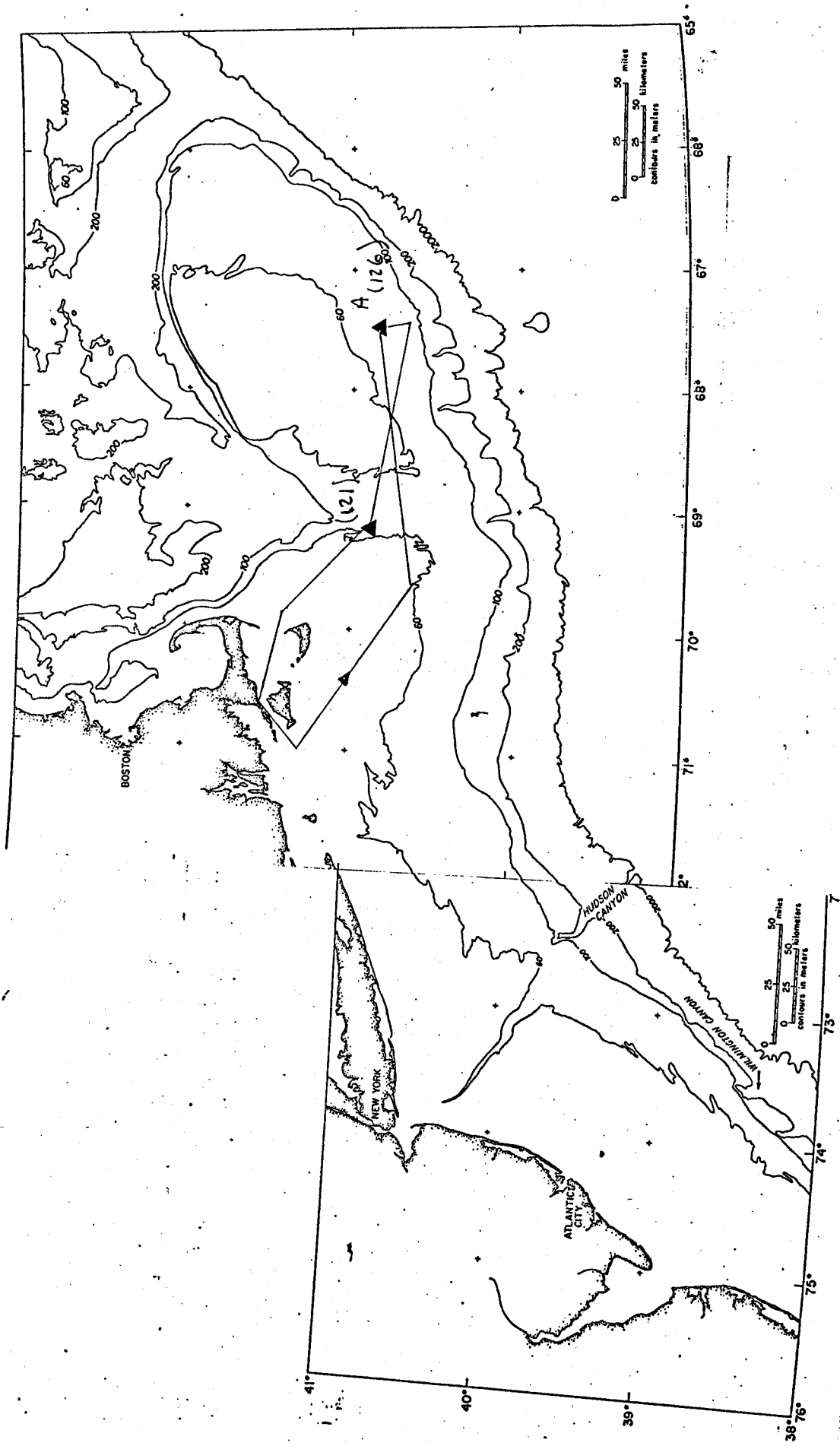
WHITEFOOT LEG I
March 8-11, 1977



WHITEFOOT LEG II
March 14-20, 1977



WHITEFOOT LEG III
March 31 - April 5, 1977



WHITEFOOT LEG IV
April 15-17, 1977